AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An image display method, which has an output brightness characteristic in which a logarithmic value of an output brightness becomes smaller as a value of an input image signal becomes larger, for displaying a visible image that said input image signal represents according to said output brightness characteristic, the image display method comprising the step of:

setting said output brightness characteristic so that a rate of change, which represents a change in a logarithmic value of said output brightness with respect to a change in said input image signal value, in a low signal value region of said image signal becomes smaller than that in an intermediate and high signal value region of said input image signal[[.]];

wherein a boundary value S_a between the low signal value region and the intermediate and high signal value region is represented by the following equation:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

where S_{max} is the maximum value of the image signal in the output brightness charasteristic.

2. (original): The image display method as set forth in claim 1, wherein said output brightness characteristic is approximately linear over approximately the entire intermediate and high signal value region.

3. (original): The image display method as set forth in claim 1, wherein a boundary value S_a between said low signal value region and said intermediate and high signal value region, and a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a are represented by the following equations:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

$$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$$

where S_{max} is the maximum value of the image signal in said output brightness characteristic and Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

4. (original): The image display method as set forth in claim 2, wherein a boundary value S_a between said low signal value region and said intermediate and high signal value region, and a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a are represented by the following equations:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

$$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$$

where S_{max} is the maximum value of the image signal in said output brightness characteristic and Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

5. (original): The image display method as set forth in claim 1, wherein said change rate in said intermediate and high signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

where S_{max} is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

6. (original): The image display method as set forth in claim 2, wherein said change rate in said intermediate and high signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

where S_{max} is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

7. (original): The image display method as set forth in claim 3, wherein said change rate in said intermediate and high signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/.S_{max})$$

where Smax is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

8. (original): The image display method as set forth in claim 1, wherein said output brightness characteristic is set so that said change rate in the high signal value region of said image signal becomes greater than that in the intermediate signal value region of said image signal.

9. (original): The image display method as set forth in claim 8, wherein said output brightness characteristic is approximately linear over approximately the entire intermediate signal value region and over approximately the entire high signal value region.

10. (original): The image display method as set forth in claim 8, wherein a boundary value S_a between said low signal value region and said intermediate and high signal value region, a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a, a boundary value

S_b between said intermediate signal value region and said high signal value region, and a logarithmic value Y (S_b) of said output brightness at said boundary value S_b are represented by the following equations:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

$$0.70 \times S_{max} \leqq S_b \leqq 1.00 \times S_{max}$$

$$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$$

$$Y_{max} - 2.15 \leqq Y(S_b) \leqq Y_{max} - 1.95$$

where S_{max} is the maximum value of the image signal in said output brightness characteristic and Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

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11. (original): The image display method as set forth in claim 9, wherein a boundary value S_a between said low signal value region and said intermediate and high signal value region, a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a, a boundary value S_b between said intermediate signal value region and said high signal value region, and a logarithmic value Y (S_b) of said output brightness at said boundary value S_b are represented by the following equations:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

$$0.70 \times S_{max} \leqq S_b \; 1.00 \times S_{max}$$

$$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$$

$$Y_{max} - 2.15 \leqq Y(S_b) \leqq Y_{max} - 1.95$$

where S_{max} is the maximum value of the image signal in said output brightness characteristic and Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

12. (original): The image display method as set forth in claim 8, wherein said change rate in said intermediate signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

where S_{max} is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

13. (original): The image display method as set forth in claim 9, wherein said change rate in said intermediate signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

where S_{max} is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

14. (original): The image display method as set forth in claim 10, wherein said change rate in said intermediate signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

where S_{max} is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

15. (currently amended): In an image display unit, which comprises a brightness circuit having an output brightness characteristic in which a logarithmic value of an output brightness becomes smaller as a value of an input image signal becomes larger, for displaying a visible image that said input image signal represents according to said output brightness characteristic,

the improvement wherein said output brightness characteristic in said brightness circuit is set so that a rate of change, which represents a change in the logarithmic value of said output brightness with respect to a change in said input image signal value, in a low signal value region of said image signal becomes smaller than that in an intermediate and high signal value region of said input image signal.;

wherein a boundary value S_a between the low signal value region and the intermediate and high signal value region is represented by the following equation:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

where S_{max} is the maximum value of the image signal in the output brightness charasteristic.

16. (original): The image display unit as set forth in claim 15, wherein said output brightness characteristic in said brightness circuit is approximately linear over approximately the entire intermediate and high signal value region.

17. (original): The image display unit as set forth in claim 15, wherein a boundary value S_a between said low signal value region and said intermediate and high signal value region, and a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a are represented by the following equations:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

$$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$$

in which S_{max} is the maximum value of the image signal in said output brightness characteristic and Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

18. (original): The image display unit as set forth in claim 16, wherein a boundary value S_a between said low signal value region and said intermediate and high signal value region, and a logarithmic value Y (S_a) of said output brightness at said boundary value S_a are represented by the following equations:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

$$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$$

in which S_{max} is the maximum value of the image signal in said output brightness characteristic and Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

19. (original): The image display unit as set forth in claim 15, wherein said change rate in said intermediate and high signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

in which Smax is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

20. (original): The image display unit as set forth in claim 16, wherein said change rate in said intermediate and high signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

in which S_{max} is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

21. (original): The image display unit as set forth in claim 17, wherein said change rate in said intermediate and high signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

in which S_{max} is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

22. (original): The image display unit as set forth in claim 15, wherein said output brightness characteristic in said brightness circuit is set so that said change rate in the high signal value region of said image signal becomes larger than that in the intermediate signal value region of said image signal.

23. (original): The image display unit as set forth in claim 22, wherein said output brightness characteristic in said brightness circuit is approximately linear over approximately the entire intermediate signal value region and over approximately the entire high signal value region.

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24. (original): The image display unit as set forth in claim 22, wherein a boundary value S_a between said low signal value region and said intermediate and high signal value region, a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a, a boundary value S_b between said intermediate signal value region and said high signal value region, and a logarithmic value $Y(S_b)$ of said output brightness at said boundary value S_b are represented by the following equations:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

$$0.70 \times S_{max} \leqq S_b \leqq 1.00 \times S_{max}$$

$$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$$

$$Y_{max} - 2.15 \leqq Y(S_b) \leqq Y_{max} - 1.95$$

in which S_{max} is the maximum value of the image signal in said output brightness characteristic and Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

25. (original): The image display unit as set forth in claim 23, wherein a boundary value S_a between said low signal value region and said intermediate and high signal value region, a logarithmic value $Y(S_a)$ of said output brightness at said boundary value S_a, a boundary value S_b between said intermediate signal value region and said high signal value region, and a logarithmic value $Y(S_b)$ of said output brightness at said boundary value S_b are represented by the following equations:

$$0.05 \times S_{max} \leqq S_a \leqq 0.30 \times S_{max}$$

$$0.70 \times S_{max} \leqq S_b \leqq 1.00 \times S_{max}$$

$$Y_{max} - 0.25 \leqq Y(S_a) \leqq Y_{max} - 0.05$$

$$Y_{max} - 2.15 \leqq Y(S_b) \leqq Y_{max} - 1.95$$

in which S_{max} is the maximum value of the image signal in said output brightness characteristic and Y_{max} is the maximum value of the logarithmic value of the brightness in said output brightness characteristic.

26. (original): The image display unit as set forth in claim 22, wherein said change rate in said intermediate signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

in which S_{max} is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

27. (original): The image display unit as set forth in claim 23, wherein said change rate in said intermediate signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

in which S_{max} is the maximum value of the image signal in said output brightness characteristic and G is said change rate.

28. (original): The image display unit as set forth in claim 24, wherein said change rate in said intermediate signal value region is represented by the following equation:

$$-(3.0/S_{max}) \leqq G \leqq -(2.5/S_{max})$$

in which S_{max} is the maximum value of the image signal in said output brightness characteristic and G is said change rate.